## Practical Points.

An Indicator for the so-called "Drop Methods" of Saline Injections.

venously, subcutaneously, and rectally, the list of and indicating conditions has grown to great length. Loss of blood; depletion of the blood from vomiting and diarrhea; lack of intake in mental cases, in cases of esophageal and pyloric strictures, and in postoperative nausea;  $an ilde{ ext{he}}$ various ıntoxications of infectious diseases, of uræmia, diabetic coma. a n d eclampsia; and such forms of poisoning mercurialism, and alcoholism, meat intoxications —these are but a few of the many

Several methods administration are at hand, but for ease and simplicity enteroclysis or rectal injection is naturally pre-ferred. The solutions need not be sterile, nor must the saline content be calculated to a n i c e t y. The apparatus is in household and the technique

found in the list.

within the pos-sibility of anyone. However, it is the object of this brief note to describe a simple improvement now in use in the wards of the Johns Hopkins Hospital.

Salt solution is readily absorbed from the large bowel, particularly in cases where it is neededas much as two quarts in four and a half minutes. But the best results have been obtained by a slower injection which will not irritate the intestine and cause expulsion. In this way the various

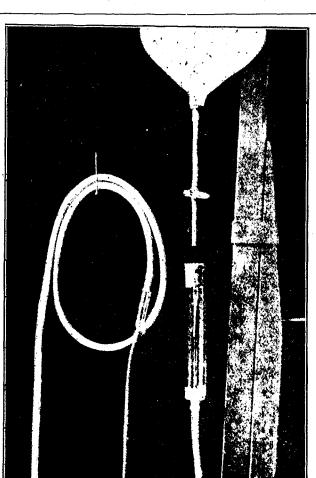
Dr. Frank J. Sladen describes in the Johns Hopkins Nurses' Alumna Magazine, "drop methods"  $_{\mathrm{the}}$ saline injections, as follows: The employment of the socalled physiological salt solution (0.6 per cent. sodium chloride) as a therapeutic measure has become soundly established. From twenty-five years of applications, intra-

"drop methods" have developed. Of their respective merits others must speak. Our improvement is in the simple indicator employed, for the idea of which we are indebted to Dr. Lawson, a graduate of the Johns Hopkins Medical School. The instrument consists simply of an air chamber (Breck feeding bottles were found useful), in which the salt solution drops before the eye from a pipette. This pipette is calibrated so that approximately fifteen drops equal one cubic centimeter. By a short rubber connection this instrument is placed just below the irrigating bag between it and the

tubing which leads to the rectal tube (a small rubber catheter). By the thumb-screw the speed can be regulated according to the doctor's orders. For example, if he wishes 66 cc. an hour, knowing the size drops in the indicator as stated above, he should order "15 drops a minute."

the drop methodis employed, such an instrument as this is necessary, in order to have any idea of the rate of flow. We suggest its use with the bottles subcutaneous for infusion. Surely it would be more satisfactory to observe the flow in this indicator than the present method of keeping watch of the height of the fluid in the infusion bottle. In the same way it might be usefully applied to intravenous saline transfusions.

The accompanyillustration clearly shows the method whereby the precision described in



Salt Solution Apparatus, Showing Indicator and Control Clamp.

the above article is attained.

To give baby's medicine.

medicine dropper.

The best method of giving a liquid drug to a baby is, says the Dietetic and Hygienic Gazette, to drop the cliquid upon the back part of the tongue with a previous page next page